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**To:** <AGreenberg@waterboards.ca.gov>  
**Date:** Monday, February 08, 2010 9:47 AM  
**Subject:** info  
**Attachments:** undated SPN memo re R & H policy opt.pdf

Hi Andree - It was nice to see you at the CRAM workshop. Here's the info I said I would send.

Regards,  
Carin High

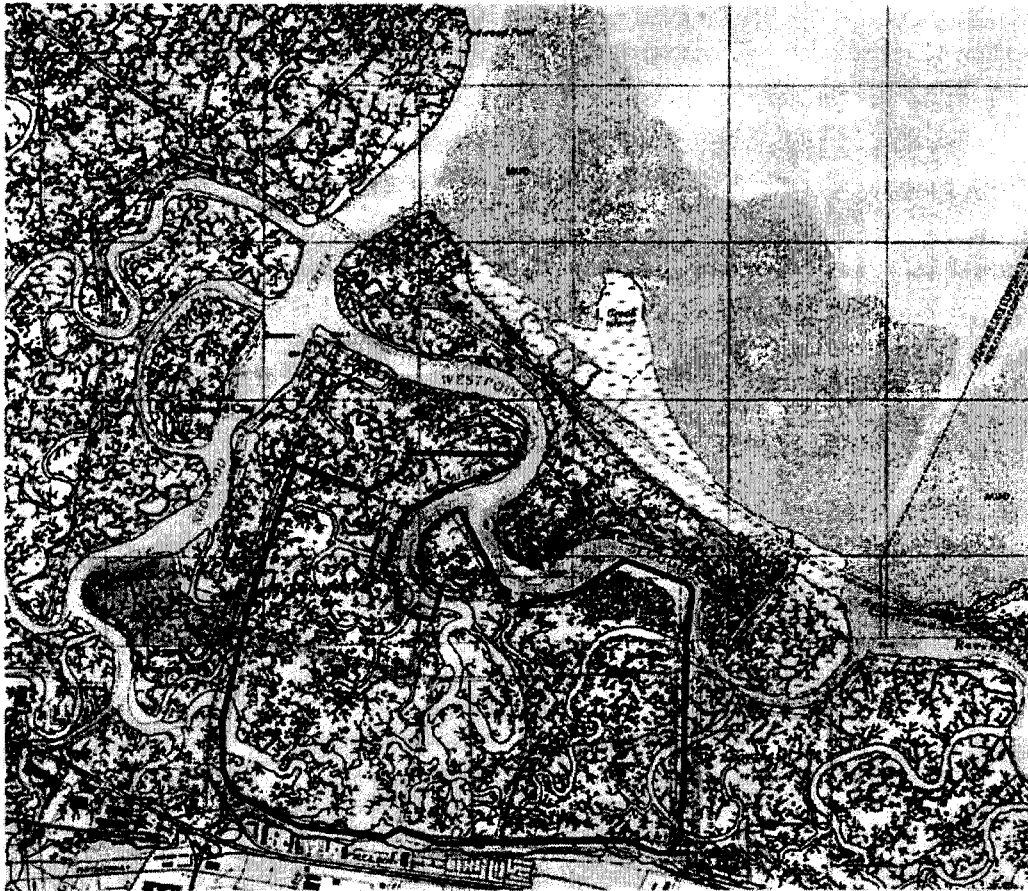
The May 25, 1983, Regulatory Memorandum issued by Calvin Fong outlines San Francisco District's policy for exerting Section 10 jurisdiction behind dikes (levees). Section 10 jurisdiction will be exercised over areas behind dikes if the following three conditions are met:

- 1) the area is presently at or below mean high water (MHW);
- 2) the area was historically at or below MHW in its "unobstructed, natural state (i.e., that area was at or below MHW before the dikes were built); and
- 3) there is no evidence (elevation data) that the area was ever above MHW.

The memorandum details procedures for determining Section 10 jurisdiction behind dikes. If we do not have historical elevation data for a site we can use the T-charts of 1850-1897 to determine the location of the historic sloughs, if any in those areas that are presently below MHW. The premise is that the historic sloughs were subject to the ebb and flow of the tides and thus were below MHW.

The U.S. Department of Commerce, National Oceanic and Atmospheric Administration National Ocean Service website has the tidal datums for Redwood City, ([http://tidesandcurrents.noaa.gov/data\\_menu.shtml?stn=9414523%20Redwood%20City.%20CA&type=Superseded%20Bench%20Mark](http://tidesandcurrents.noaa.gov/data_menu.shtml?stn=9414523%20Redwood%20City.%20CA&type=Superseded%20Bench%20Mark)). MHW at Redwood City, Warf 5 is 2.282 meters or 7.487 feet.

The current USGS quad sheet with an overlay of historic sloughs shows that historically, the project site had several double sided sloughs:



The historic sloughs are still visible in the southern portion of the project site. Below is an aerial photograph taken on June 6, 2000 showing the southern portion of the site. Arrows are pointing to double sided sloughs:



The San Francisco District could assert Section 10 jurisdiction within the double sided sloughs that are still evident in aerial photographs. The San Francisco District could only exert Section 10 jurisdiction on the remaining areas of the project site if it is determined that this area is currently below MHW and has never been higher than MHW. That determination would require the applicant to provide current and historic elevation data.

#### Basic Facts:

- Approximately 300,000 tons of salt, requiring 13 million tons of bay water, is produced at the Redwood City Plant annually. The entire process of salt making takes about 1.5 years.
- Within the Newark and Redwood City plant there are currently 75 miles of levee.
- 3.8 miles of these levees are rip-rapped. 10 -20 % must be maintained annually.
- There is approximately 41,000 square feet of dredge lock at the Redwood City Plant.
- The levees are maintained by a floating dredge. The dredge has been in use since 1936. The salt ponds are accessed from the bay via the floating dredge and the access channel. The locks require maintenance and can only be used at high tides. The extensive levee maintenance is required due to erosion, subsidence, and consolidation.
- The system is seasonal. Depending on when you see them, your impression will be largely different.
- In the South Bay crystallizer ponds were constructed by filling slough channels and raising bed elevations with pumped Bay mud.
- There are 270 acres of bittern storage ponds in Redwood City.
- One study (Lonzarich) found 15 species of fish in South Bay salt ponds, six of which reproduce in the ponds.
- Soils in the ponds are composed of silty clays that were deposited from Bay waters and tributary freshwater systems.
- Nearly every south bay salt pond elevation is below intertidal marsh elevation (below MTL), mainly as a result of subsidence.
- Ponds can be divided into three categories based on proximity to the bay; open bay edge, tributary channel, and no tidal edge. Some support outboard tidal marsh while others do not. Feasibility for restoration depends on this proximity to the bay.
- The South Bay Salt Pond Restoration is a 50-year project which plans to restore 15,000 acres of former salt ponds to a mix of managed ponds and tidal wetlands. The effort will take advantage of natural former slough and drainage channels and levee breaching or lowering to restore tidal action to ponds.
- In 1994, prior to the transfer of the Napa Salt ponds, Cargill's annual O&M budget was estimated to be approximately \$500,000 annually.
- Cargill sold 16,500 acres of salt pond for \$100 Million to Federal, State, and Local government.
- There has been Corps permits in place for O&M since 1995 - *do not*